

What is claimed is:

- 1 1. An electric motor comprising:
2 a housing having first and second ends;
3 a rotatable shaft extending through the housing;
4 a commutator disposed in the housing about the shaft;
5 a plurality of brushes disposed in the housing and engagable with the
6 commutator ;
7 a bushing mounted in the housing in engagement with the shaft; and
8 a lubricant recirculation member disposed in the housing about the
9 shaft between the commutator and the bushing, the lubricant recirculation member in
10 the form of a body having a unitarily joined first lubricant recirculation and wear
11 surface portion and a second vibration dampening portion.
- 1 2. The motor of claim 1 wherein:
2 the first portion has an internal cavity with a side wall shaped to
3 recirculate lubricant away from the commutator.
- 1 3. The motor of claim 1 wherein:
2 the first and second portions have complementary, mating members
3 for mechanical interlock of the first and second portions.
- 1 4. The motor of claim 1 wherein:
2 the second portion of the body fixedly engages the motor shaft.
- 1 5. The motor of claim 4 wherein:
2 the second portion is formed of a thermoplastic elastomer.
- 1 6. The motor of claim 5 wherein:
2 the thermoplastic elastomer is a polyether ester copolymer.

1 7. The motor of claim 1 further comprising:
2 complementary peripheral interlock members formed on the first and
3 second portions.

1 8. The motor of claim 7 wherein:
2 the complementary interlock members include annular radially inward
3 and radially outward complementary members on the first and second portions.

1 9. The motor of claim 1 further comprising:
2 a plurality of circumferentially spaced fingers extending from the first
3 portion into a central bore in the second portion, a radially innermost surface of each
4 of the plurality of fingers engaging the shaft of the motor to center the lubricant
5 recirculation member about the shaft.

1 10. The motor of claim 1 wherein:
2 the first portion of the body of the lubricant recirculation member is
3 formed of molybdenum disulfide filled nylon 6, 6.

1 11. The motor of claim 1 wherein the first portion of the body
2 further comprises:
3 a base having a wear surface contacting the bushing; and
4 non-linear sidewalls extending away from the base to direct lubricant
5 from the bushing away from the base.